Because Harrington's hafnocenes achieve Harrington's objective (i.e. crystalline polycyclic olefins) does not make Applicants' objective obvious. Preparing a highly crystalline cyclic polymer is not analogous to preparing an olefin polymer in the presence of a hafnocene having an unexpectedly improved catalytic activity. There is simply nothing in Harrington that would suggest that Applicants' hafnocenes would provide a polymerization process manifesting high productivity together with previously known hafnocene catalyst benefits.

It is respectfully submitted that the Examiner inadvertently misunderstood the argument presented on page 5 of the Appeal Brief. There is no question that the compound named at column 3, lines 63 to 65 is one that contains the tertiary butyl group. Applicants still maintain, as the patentee so states, that the particular compound as exemplified in Fig. 1 exemplifies the class of compounds suitable in accordance with Harrington's invention.

In any event, it is maintained that Harrington does not disclose hafnocenes with either linear or iso-alkyl substituents. Although those in the art understand the meaning of "alkyl" one would have to pick, try and choose among an almost unlimited number of alkyl groups to arrive at Applicants' invention, i.e. a hafnocene catalytic process that would manifest high activity. Harrington does not address activity; the prior art relating to hafnocenes recognizes that hafnocenes manifest poor activity. It is therefore respectfully submitted that at most Harrington would merely be an invitation to try alkyl substituents other than those specifically disclosed substituents expecting at most to obtain a crystalline polymer. There is simply no teaching, suggestion or motivation to be gleamed from Harrington regarding the use of iso or linear alkyl substituent in order to obtain a highly active hafnocene. Absent such teaching, suggestion or motivation it is respectfully submitted that the Examiner has not raised a prima facie case of obviousness. The essential elements for finding a prima facie case of obviousness are missing in the Examiner's rejection over Harrington (MPEP 2144.08(II)(A).

Applicants' contribution to the art relates to the catalyst and the process of polymerizing in the presence of the catalyst. Applicants have clearly demonstrated unexpected results for the catalyst, as recognized and admitted to by the Examiner. Absent the establishment of any prima facie case of obviousness and absent any § 112 rejection regarding enablement it is respectfully submitted that the full scope of Applicants' claims is proper. Withdrawal of the rejection is respectfully urged.

Claims 10 to 14, 16, 17, 20, 27 to 32, 51 to 54, 56 and 57 have been rejected under 35 U.S.C. § 103 (a) as being unpatentable over Doyle et al (hereinafter "Doyle") for reason set forth in item 6 of the Office action mailed March 20, 2000. This rejection is respectfully traversed for reason recited in the Appeal Brief filed August 9, 2000, all of which is incorporated herein by reference. Applicants are thoroughly familiar as to the meaning of "alkyl". Nevertheless, it is respectfully submitted that the disclosure of tertiary alkyl groups as a part of a catalyst for making highly crystalline polymers does not suggest that within the scope of "alkyl" there are groups that provide for an unexpected benefit. More particularly for unexpected benefits that the prior art has not heretofore associated with hafnocenes in the polymerization of olefins.

As in the response to Harrington, Applicants should be entitled to the full scope of their inventive discovery. Withdrawal of the rejection is respectfully urged.

Claims 10 to 14, 16 to 23, 25, 26, 28 to 31 and 51 to 57 have been rejected under 35 U.S.C. § 103 (a) as being unpatentable over Jejelowo et al. (hereinafter " Jejelowo) for reason set forth in item 13 of the Office action mailed October 12, 1999. This rejection is respectfully traversed for reason recited in the Appeal Brief filed August 9, 2000, all of which is incorporated herein by reference. It is noted that the Examiner has not responded to any of the arguments raised in the Appeal Brief. All the Examiner is asserting is that the scope of the claims are to broad in view of the Examples. The Examiner has provided no scientific basis upon which to question the operability of the full scope of Applicants' claimed invention. The Application satisfies the enablement clause of 35 U.S.C. § 112. A prima facie case of obviousness over Jejelowo has not been established. Applicants should be entitled to the full scope of their invention. Withdrawal of the rejection is respectfully urged.

Claims 18, 19, 21 to 23, 25 and 26 have been rejected 35 U.S.C. § 103 (a) as being unpatentable over Doyle et al., optionally in view of Tsutsui for reason set for in item 8 of the Office action mailed March 20, 2000. This rejection is respectfully traversed for reason recited in the Appeal Brief filed August 9, 2000, all of which is incorporated herein by reference.

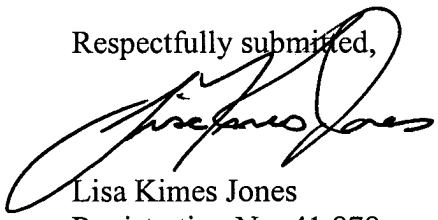
It is respectfully submitted that this rejection has not responded to the issues raised by Applicants in the Appeal Brief. For example, the Examiner has not responded to why Tsutsui does not satisfy the deficiencies found in Doyle. Withdrawal of the rejection is respectfully urged.

Claims 10 and 14 have been provisionally rejected under 35 U.S.C. § 101 as claiming the same invention as that of claims 5 and 7 of copending Application No 09/207,213. Correction is being held in abeyance pending indication of allowable subject matter.

Claims 11 to 13, 16 to 23, 25 to 32 and 51 to 57 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as s being unpatentable over claims 5 and 7 to 14 of copending Application No. 09/207,213. Correction is being held in abeyance pending indication of allowable subject matter.

In view of the above remarks it is respectfully submitted that this case contains allowable subject matter pending removal of the double patenting rejections. Prompt notice of allowance is respectfully solicited.

Respectfully submitted,



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